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10/729,725

12/04/2003

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PALO ALTO, CA 94306

10/18/2007

EXAMINER

KASZTEJNA, MATTHEW JOHN

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**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Application Number: 10/729,725  
Filing Date: December 04, 2003  
Appellant(s): WEIRICH, JOHN PAUL

**MAILED  
OCT 18 2007  
GROUP 3700**

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John Weirich  
For Appellant

**EXAMINER'S ANSWER**

This is in response to the appeal brief filed May 18, 2007 appealing from the Office action mailed January 16, 2007.

**(1) Real Party in Interest**

A statement identifying by name the real party in interest is contained in the brief.

**(2) Related Appeals and Interferences**

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

**(3) Status of Claims**

The statement of the status of claims contained in the brief is correct.

**(4) Status of Amendments After Final**

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

**(5) Summary of Claimed Subject Matter**

The summary of claimed subject matter contained in the brief is correct.

**(6) Grounds of Rejection to be Reviewed on Appeal**

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

**(7) Claims Appendix**

The copy of the appealed claims contained in the Appendix to the brief is correct.

**(8) Evidence Relied Upon**

2003/0085994	Fujita et al.	5-2003
5,668,555	Starr	9-1997

**(9) Grounds of Rejection**

The following ground(s) of rejection are applicable to the appealed claims:

Claims 21-28 rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent Application Publication No. 2003/0085994 to Fujita et al. in view of U.S. Patent No. 5,688,555 to Starr.

In regards to claims 21-25 and 27-28, Fujita et al. disclose a capsule imaging system comprising: imaging means for imaging at least a portion of a gastro-intestinal digestive tract in a subject by emitting and receiving a plurality of electromagnetic signals above three gigahertz (see paragraphs 0051-52, 0063 and 0098), a communications means for communication with at least one antenna outside of the GI digestive tract of the subject including at least one radio transmitter (see paragraph 0122); a controlling circuit to control a plurality of communication operations by the radio transmitter, and to control at least one operation of the imaging means (see Figs. 3-6); a capsule to enclose the imaging means, communications means and the controlling circuit (see Fig. 2); and a power supply 21 inside the capsule to supply electrical power to the communication means and the imaging means (see paragraph 0052). Fujita et al. are silent with respect to the imaging means including an ultra-wideband sensor system at frequencies in the radio wave spectrum substantially between 3.1 and 10.6 gigahertz. Starr teaches of an analogous imaging system and apparatus which

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implements ultra-wideband radar motion sensors to provide three-dimensional images in real-time. Furthermore, Starr discloses an object of the invention is to provide an imaging system for use in the biological sciences (see Cols. 1-2). It would have been obvious to one skilled in the art at the time the invention was to use an ultra-wideband imager in the apparatus of Fujita et al. to provide an alternate imaging means capable of producing an image having accurate three-dimensional structure localization with minimal distortion as taught by Starr.

**In regards to claim 26**, Fujita et al. disclose a capsule imaging system, wherein the communications transmitter unit operates in conjunction with a wearable vest-style garment for the subject having the GI digestive tract to wear as the capsule travels in the GI digestive tract, wherein the wearable vest-style garment includes at least one communication signal receiving antenna 4 to receive a plurality of radio wave signals from the communications transmitter unit (see Fig. 1a).

#### **(10) Response to Argument**

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., a swallowable capsule) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). The applicant states that at the time the invention was made, UWB imaging devices, such as that of Starr, were very large and the UWB circuitry was not sized at the microchip scale, and thus would not be used with a small capsule device. However,

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Starr clearly teaches of a useful radar circuit as being in *microcircuit* form and that the individual imaging unit is physically contained within a housing (see Col. 3, Lines 12-29). Furthermore, regardless of size, the combination of Starr and Fujita et al. would result in a UWB capsule imaging system that would be swallowable by a whale or shark.

In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, Starr teaches of an analogous imaging system and apparatus which implements ultra-wideband radar motion sensors to provide three-dimensional images in real-time. Furthermore, motivation to combine the apparatuses of Fujita et al. and Starr is provided by the fact that Fujita et al. teaches the desirability of using various and alternate imaging means in the endoscopic capsule, and Starr teaches an object of the invention is to provide an imaging system for use in the biological sciences. Starr teaches of various advantages to using UWB in the biological sciences such as providing "real-time" investigation of anatomic, physiologic, and pathologic processes with superior structural resolution and providing tissue differentiation imaging, motion and blood flow visualization, and accurate three dimensional structure location for comparative analysis and invasive

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intervention (see Col. 2, Lines 8-30). It would have been obvious to one skilled in the art at the time the invention was to use an ultra-wideband imager in the apparatus of Fujita et al. to provide an alternate imaging means having no adverse biological impact on a patient, capable of producing an image having accurate three-dimensional structure localization with minimal distortion as taught by Starr. Thus, as broadly as claimed, the combination of Fujita et al. and Starr meet the limitations of the recited claims.

**(11) Related Proceeding(s) Appendix**

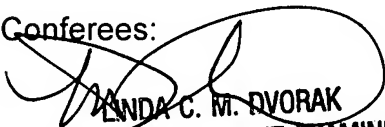
No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

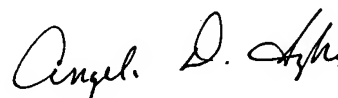
For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

  
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